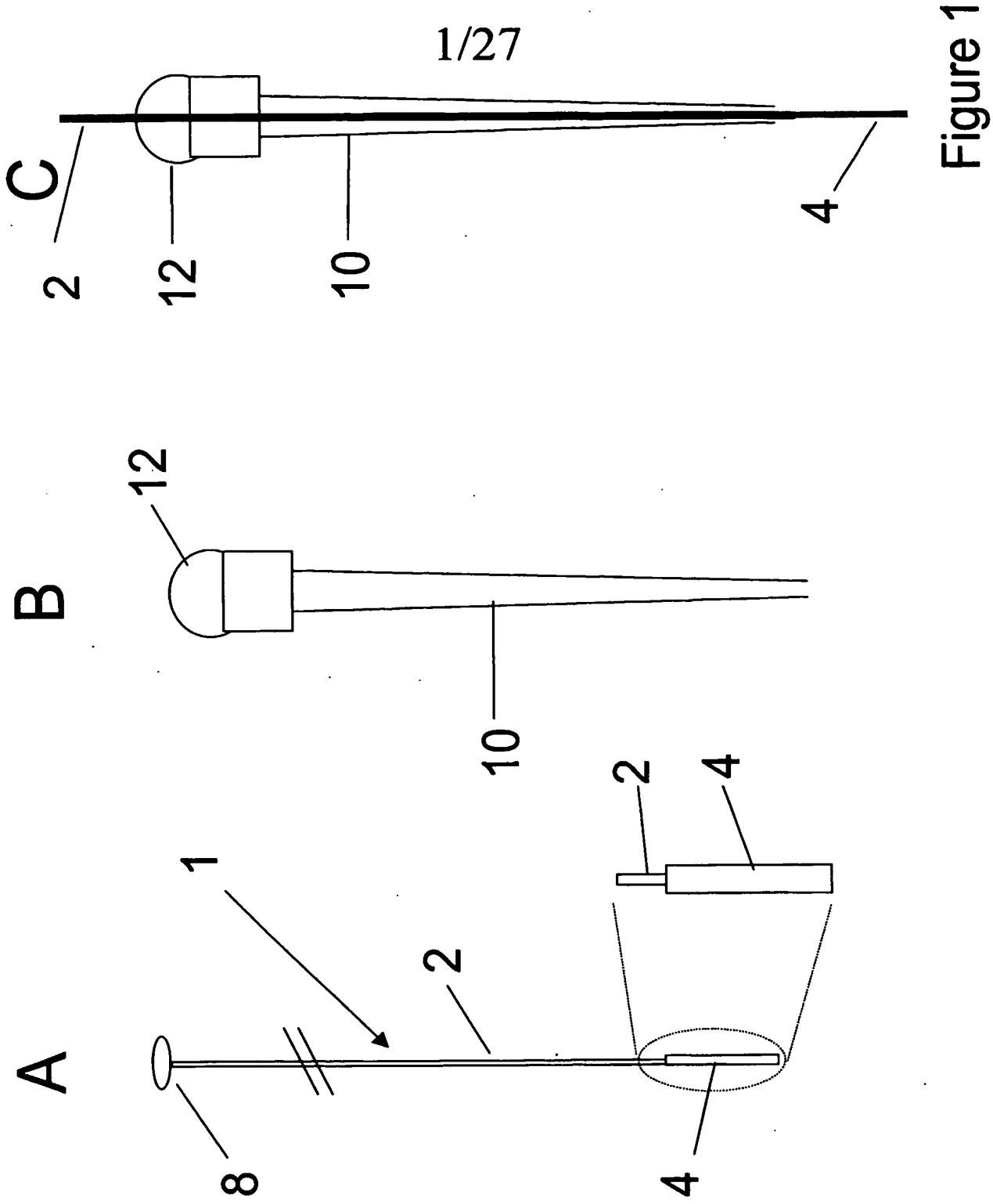


Figure 1

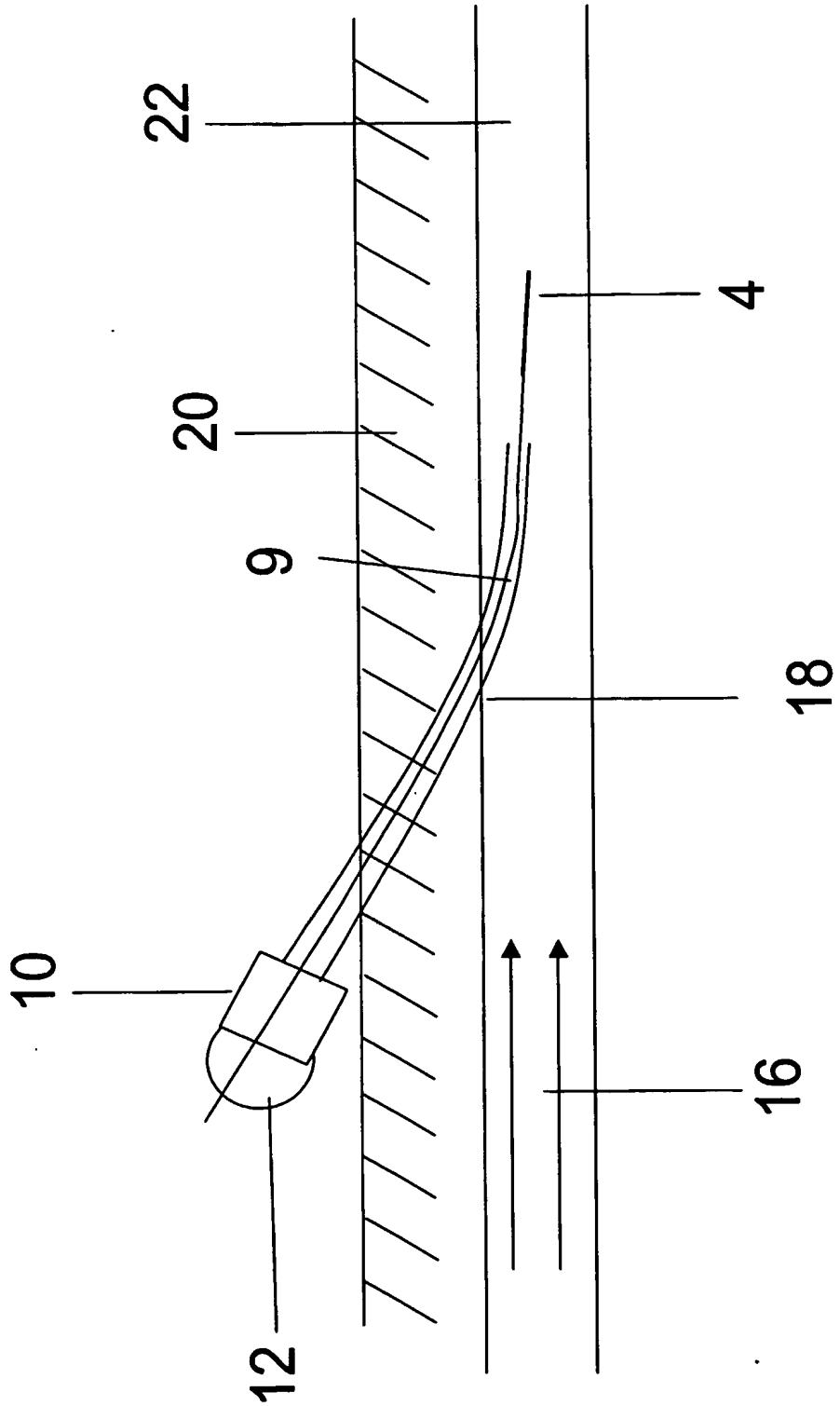


Figure 2

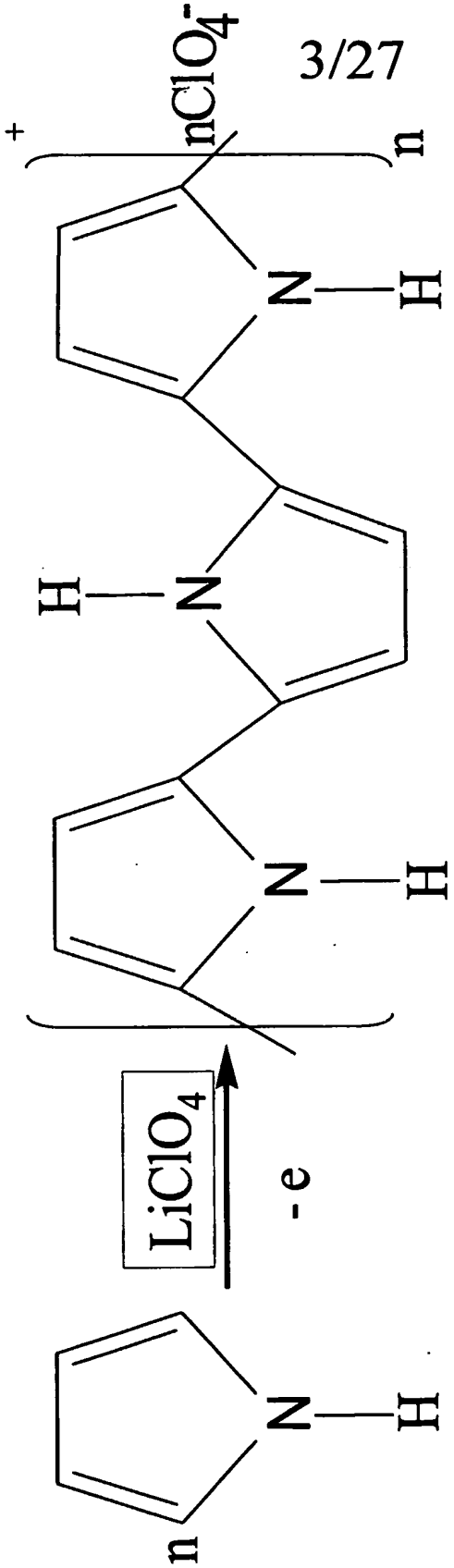
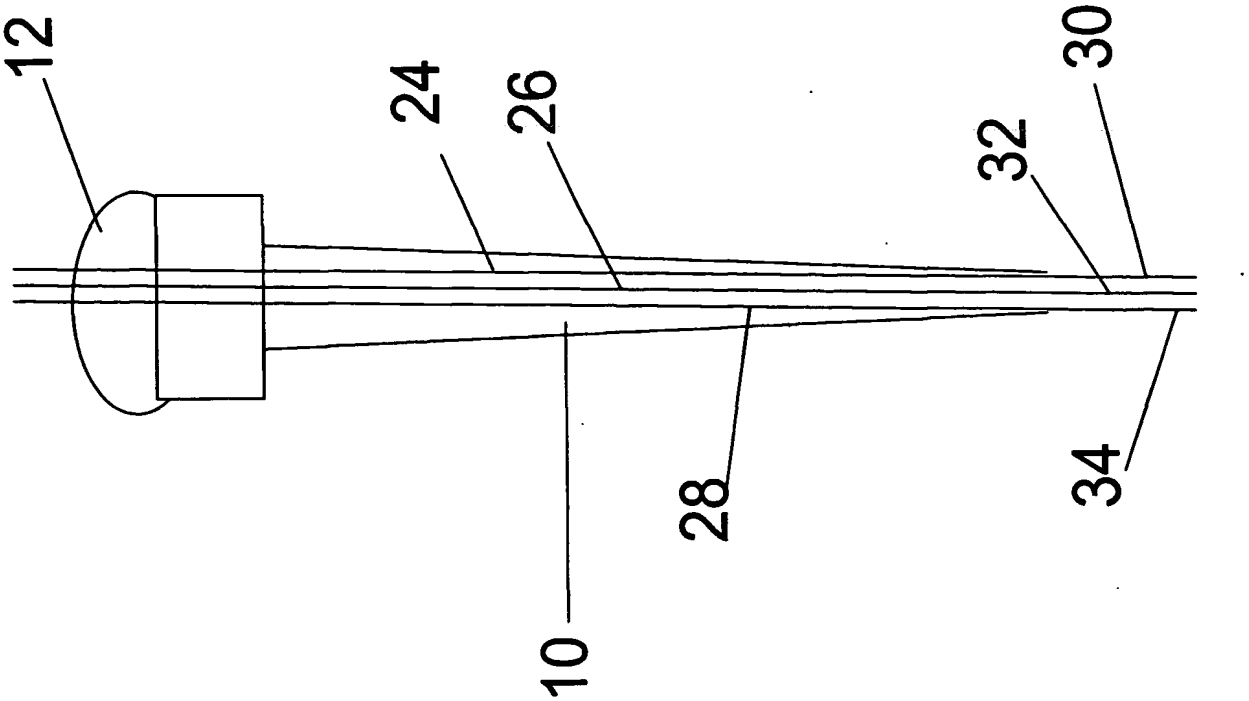


Figure 3

Figure 4



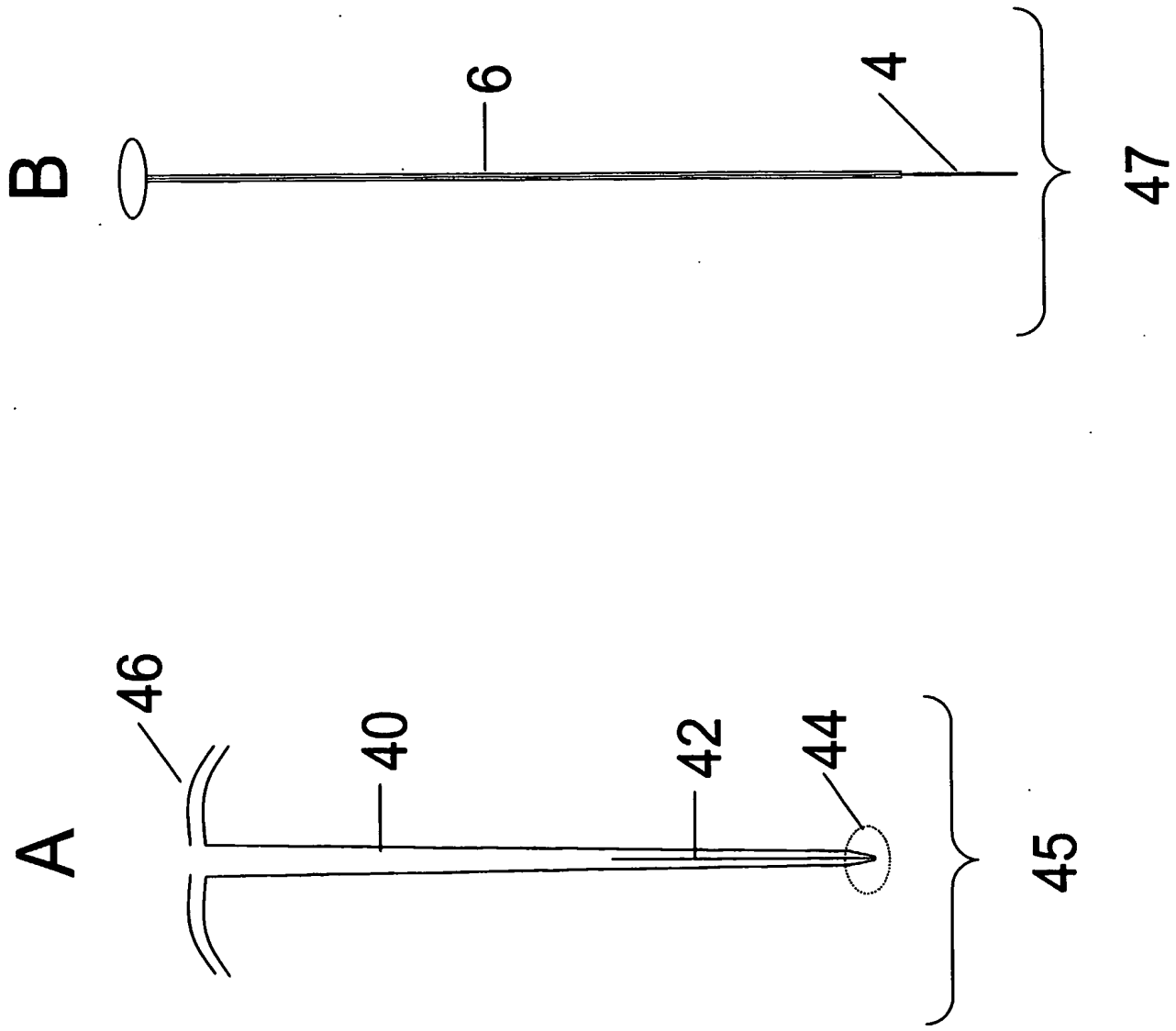


Figure 5

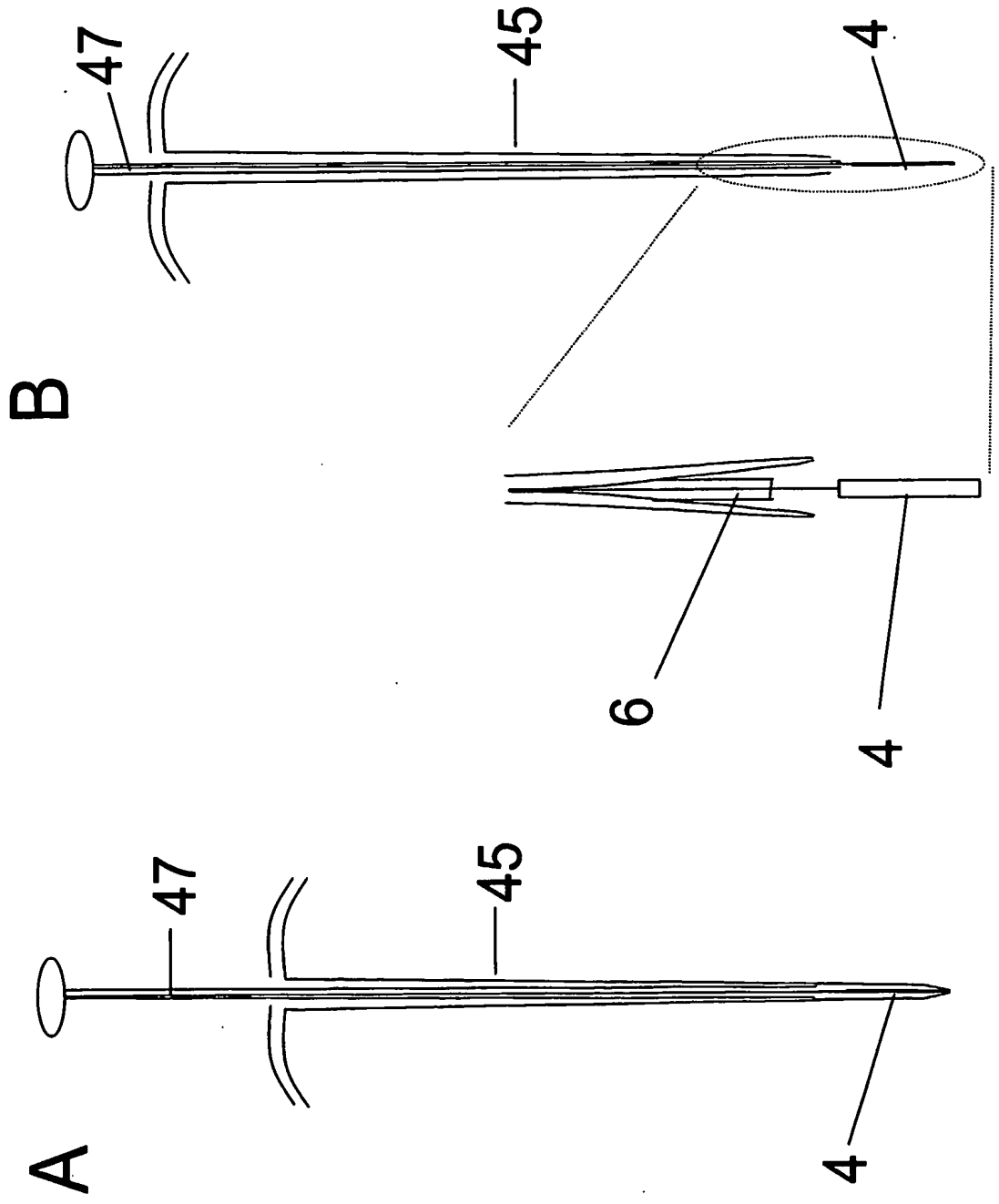


Figure 6

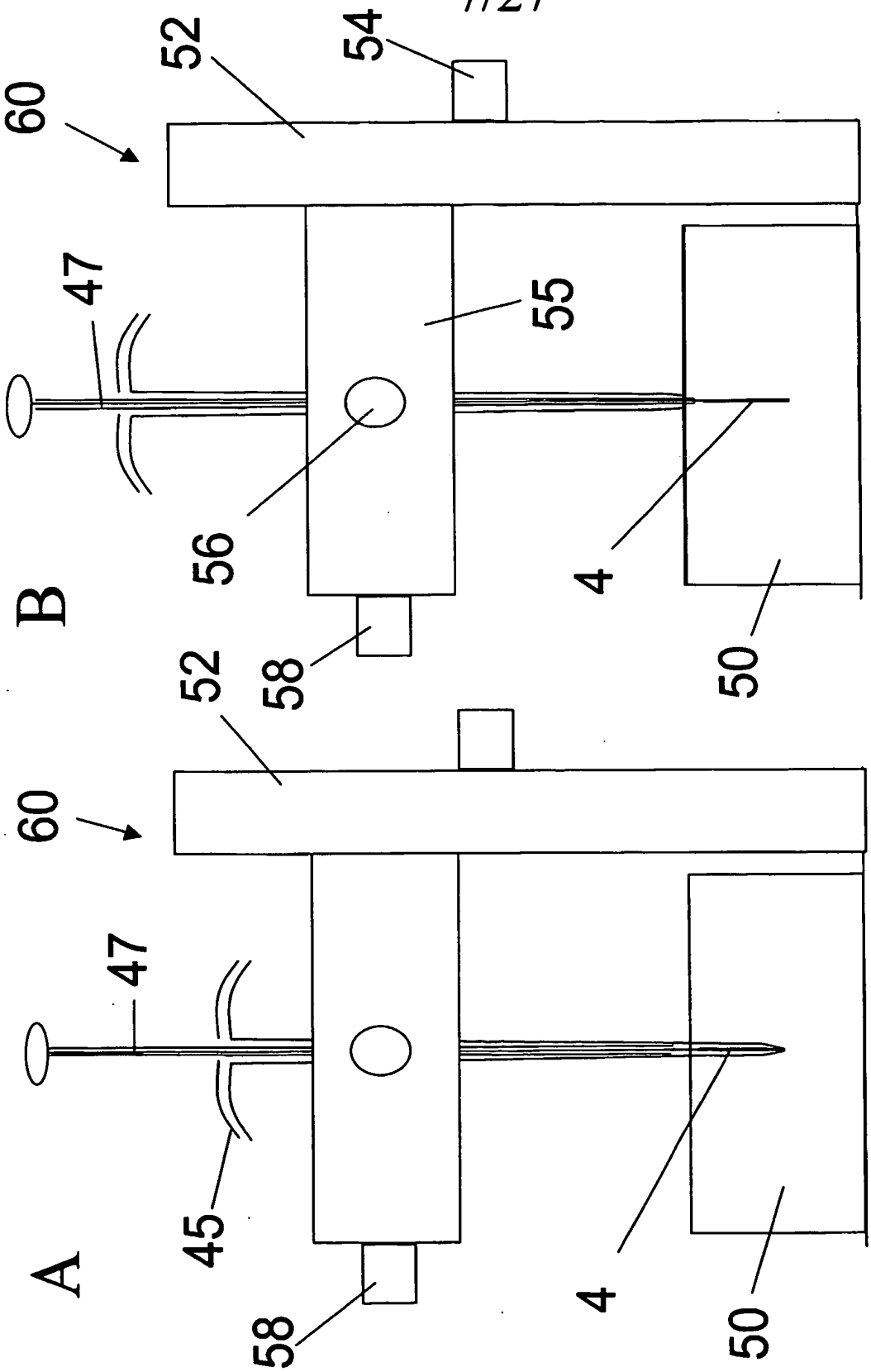


Figure 7

Figure 8

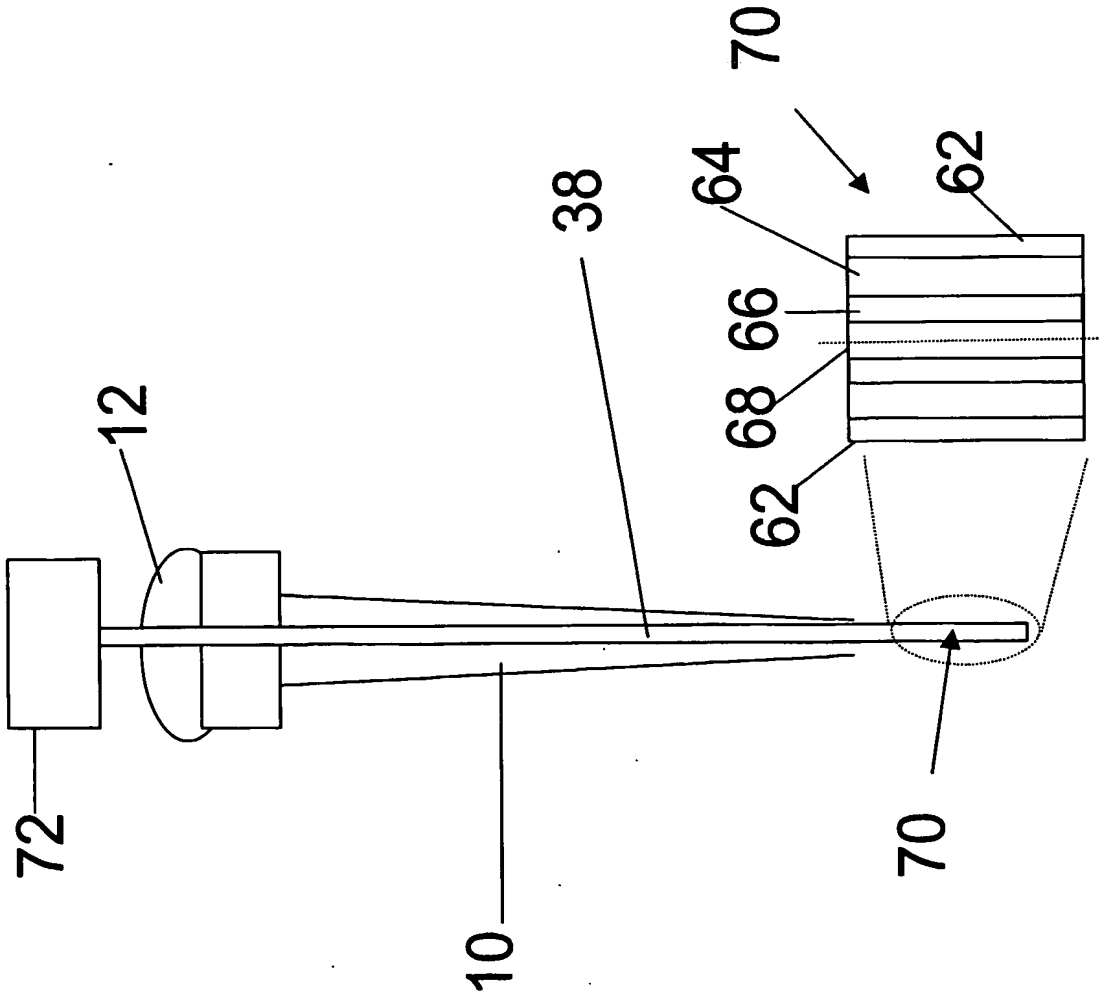
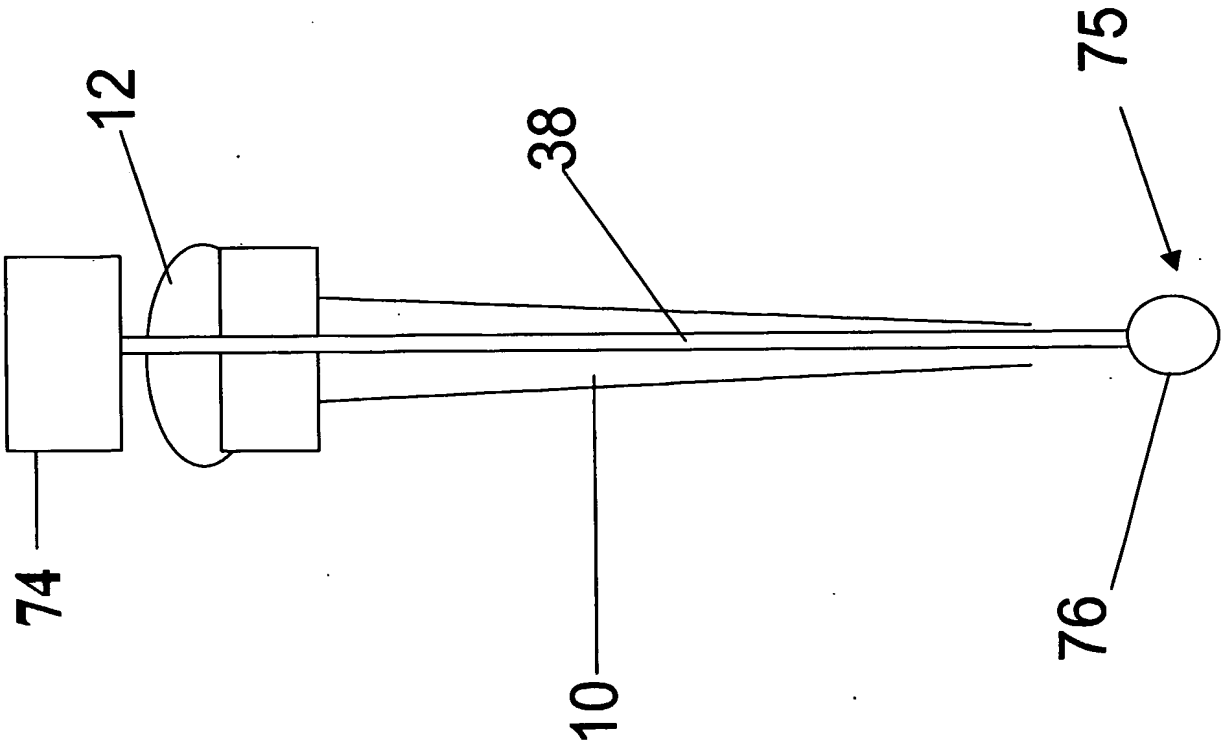


Figure 9



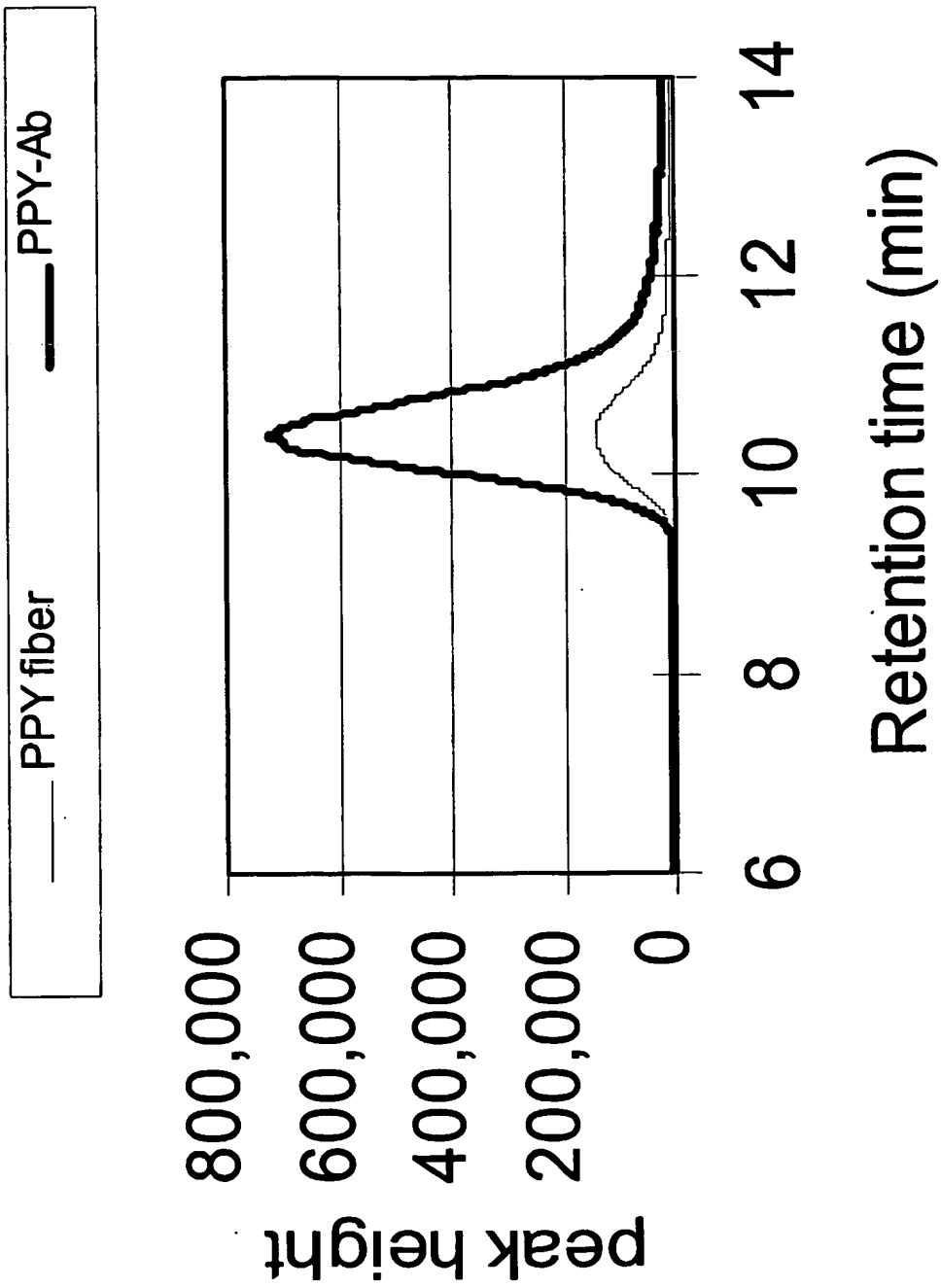
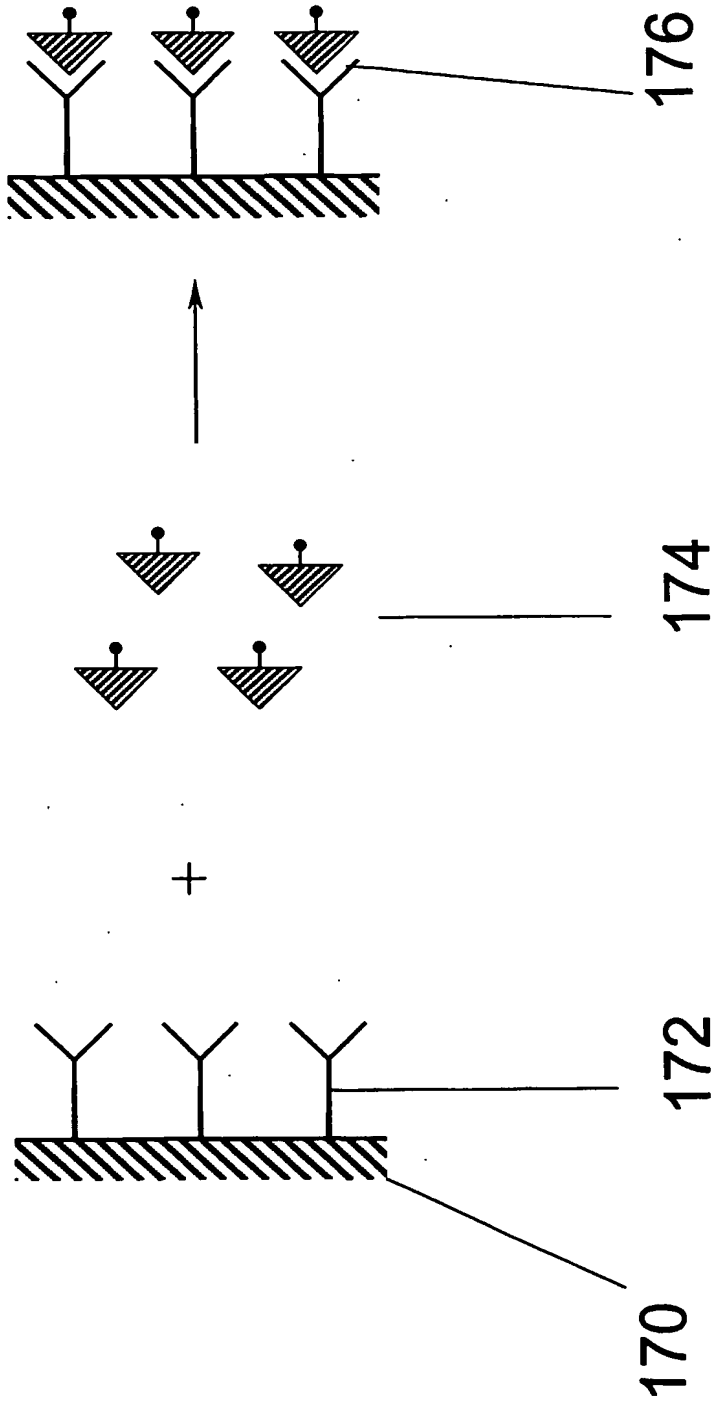

PPY fiber
PPY-Ab
peak height
800,000
600,000
400,000
200,000
0
6
8
10
12
14
Retention time (min)

Figure 10

Figure 11



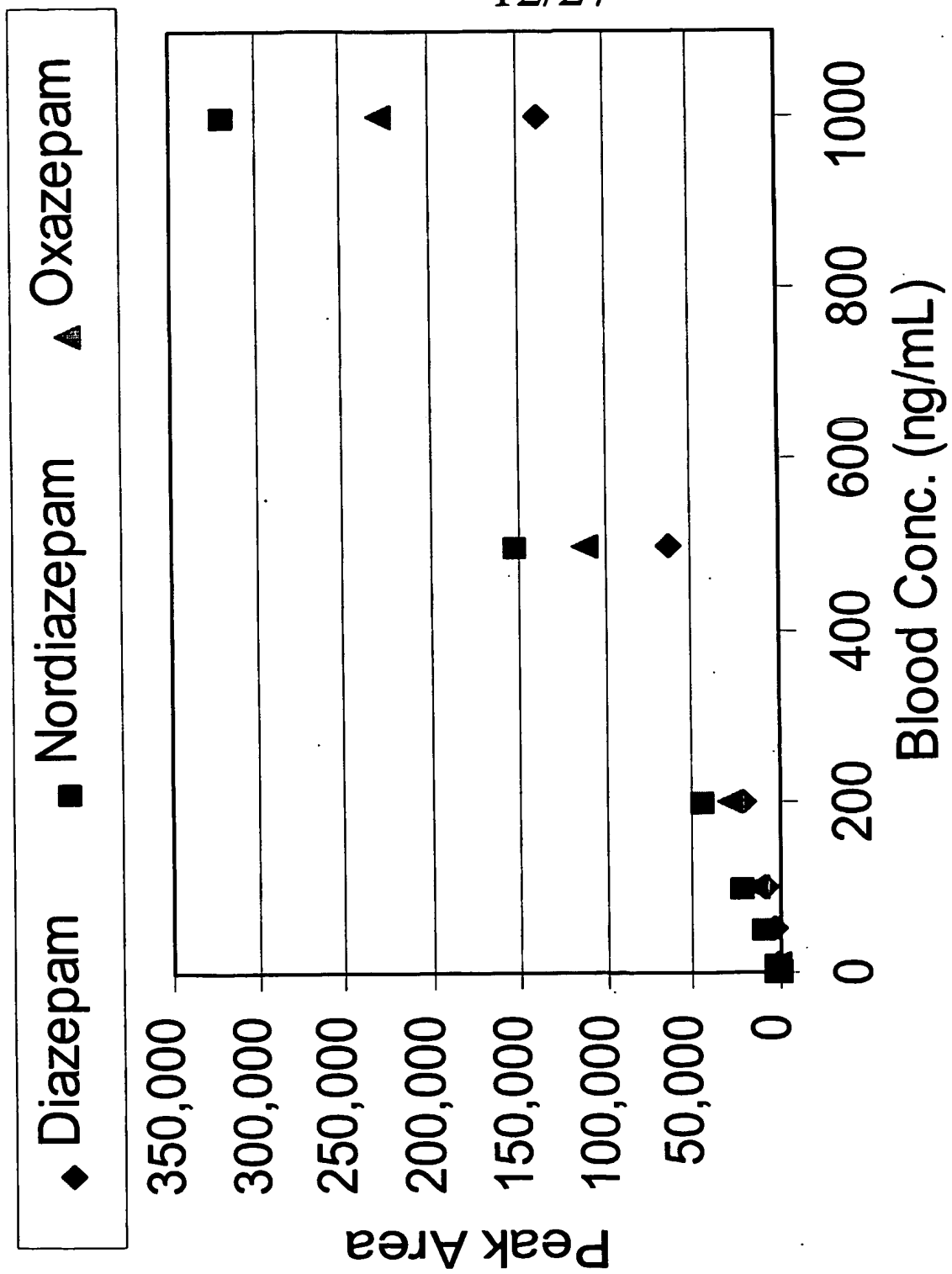

Diazepam
Nordiazepam
Oxazepam
Peak Area
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
0
200
400
600
800
1000
Blood Conc. (ng/mL)

Figure 12

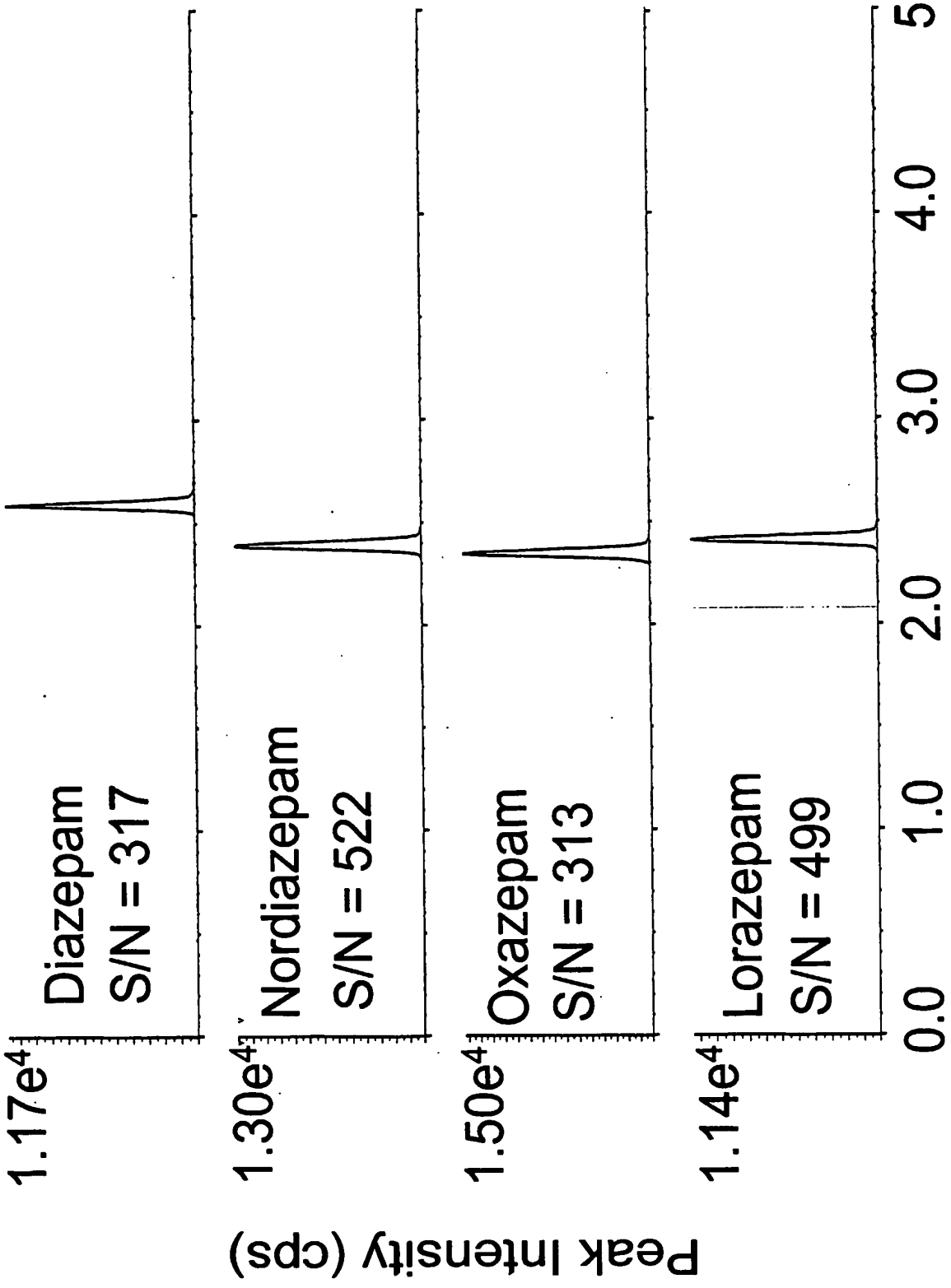
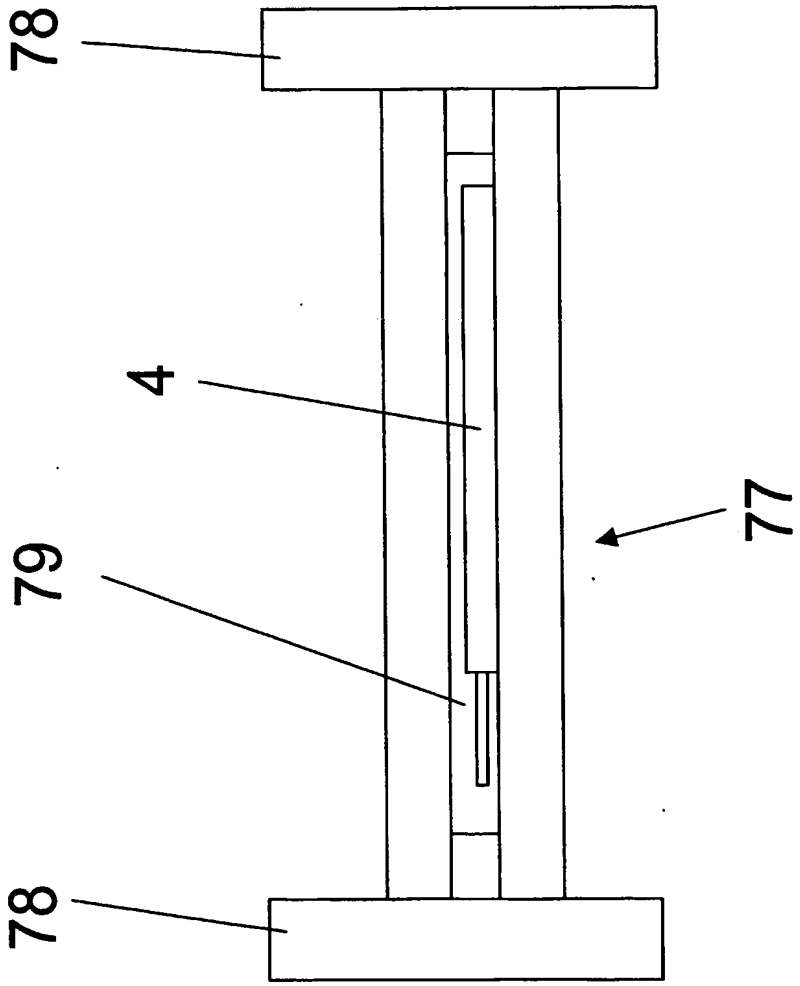

Diazepam
S/N = 317
Nordiazepam
S/N = 522
Oxazepam
S/N = 313
Lorazepam
S/N = 499
1.17e4
1.30e4
1.50e4
1.14e4
Peak Intensity (cps)
0.0
1.0
2.0
3.0
4.0
5.0
Time (min)

Figure 13

Figure 14



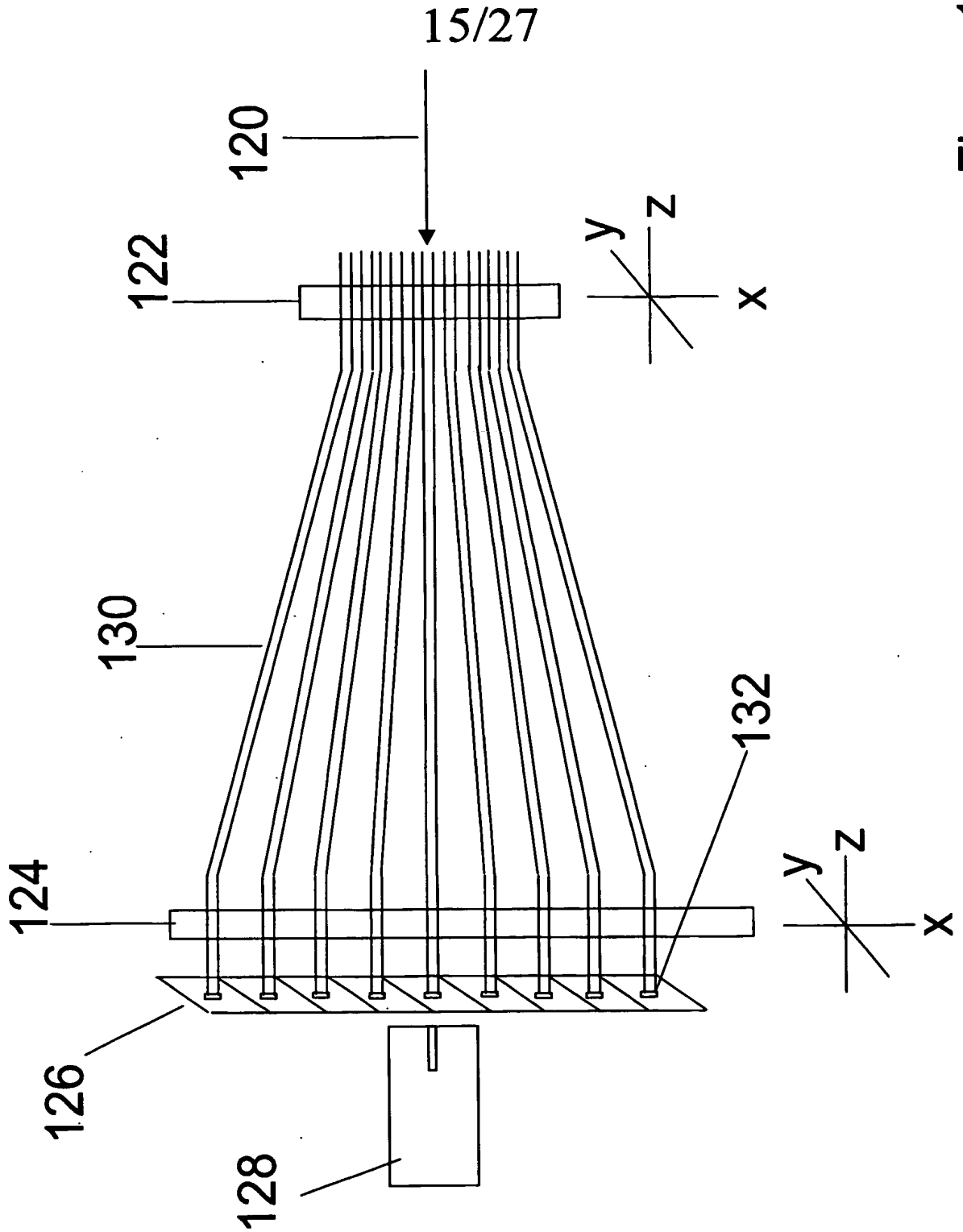


Figure 15

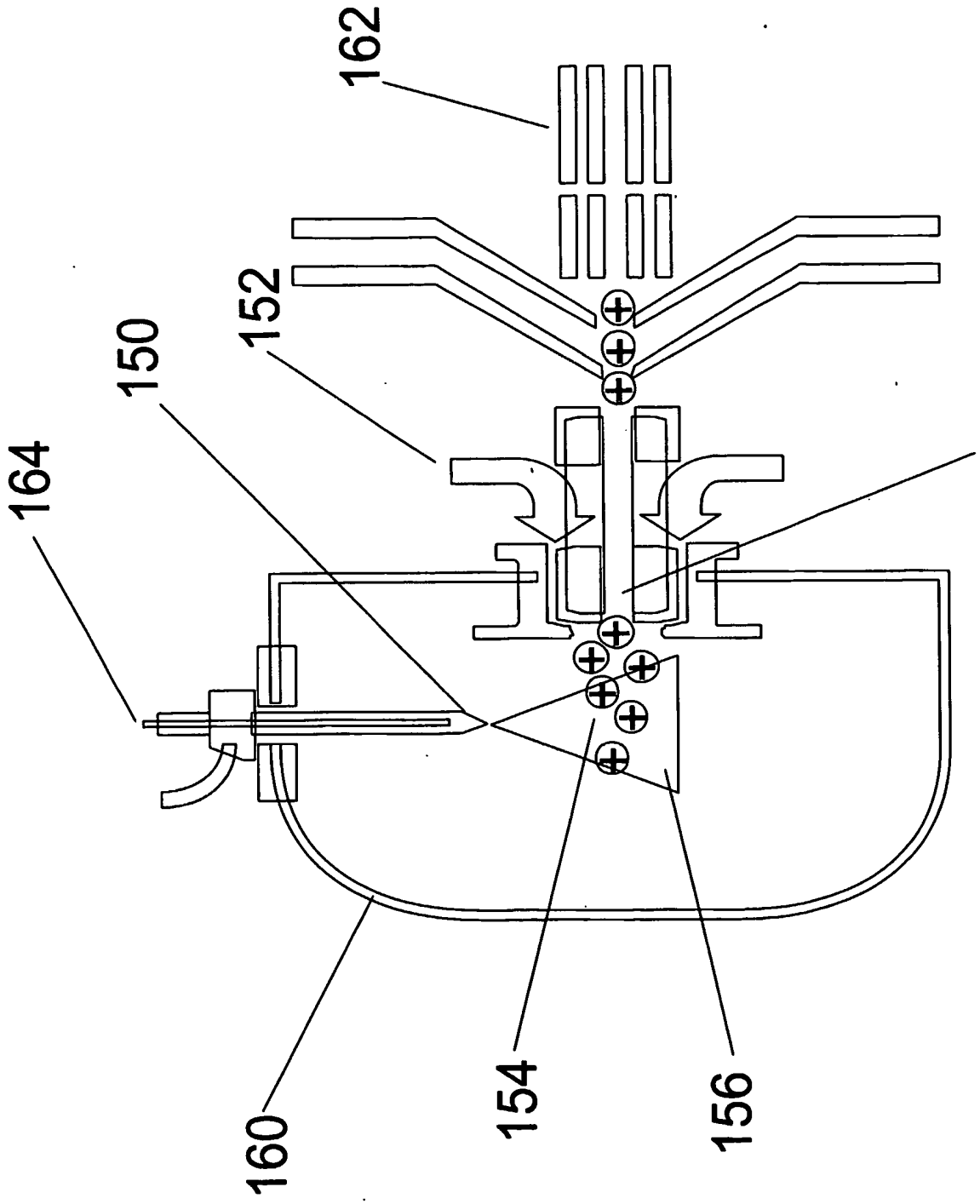


Figure 16

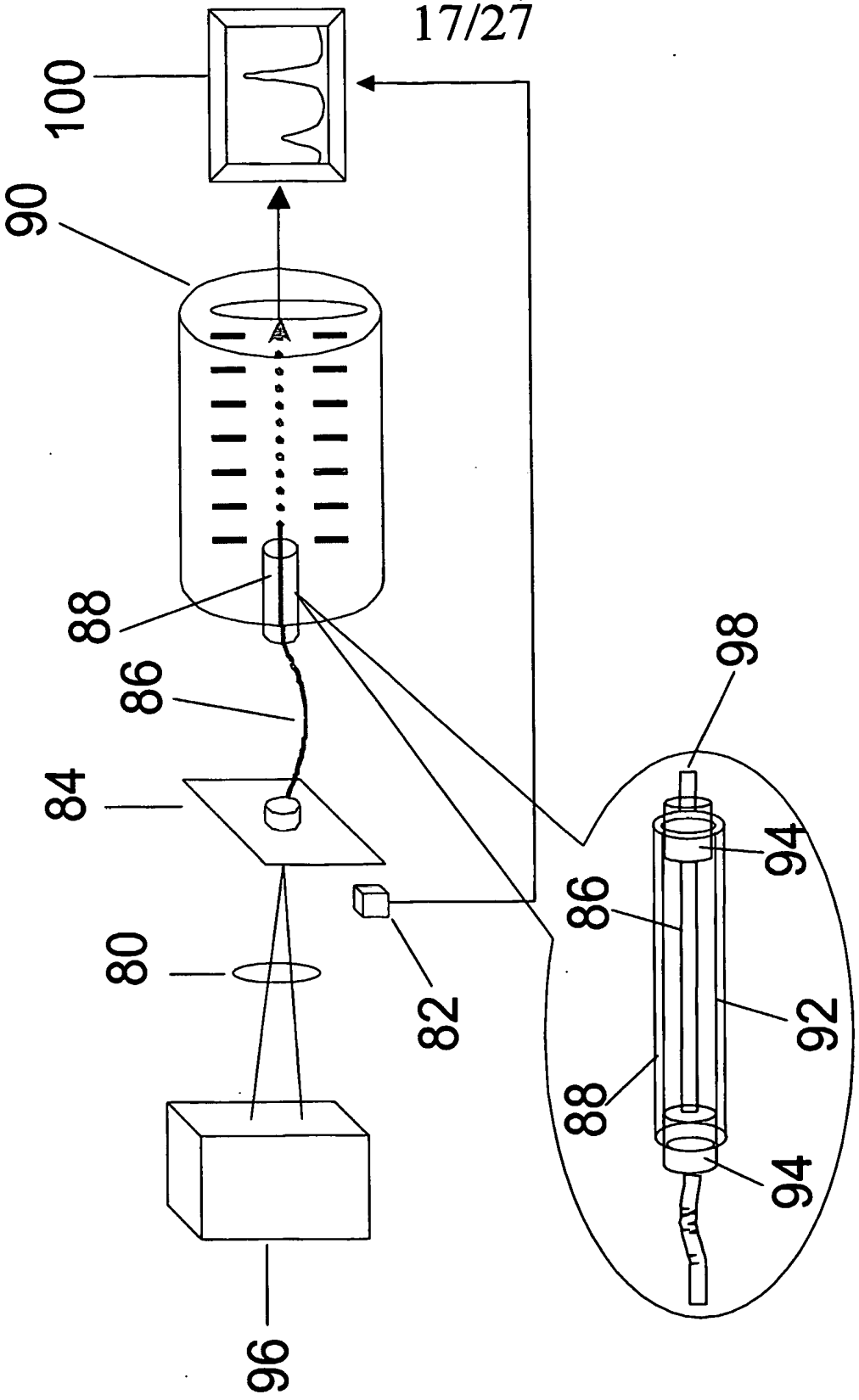


Figure 17

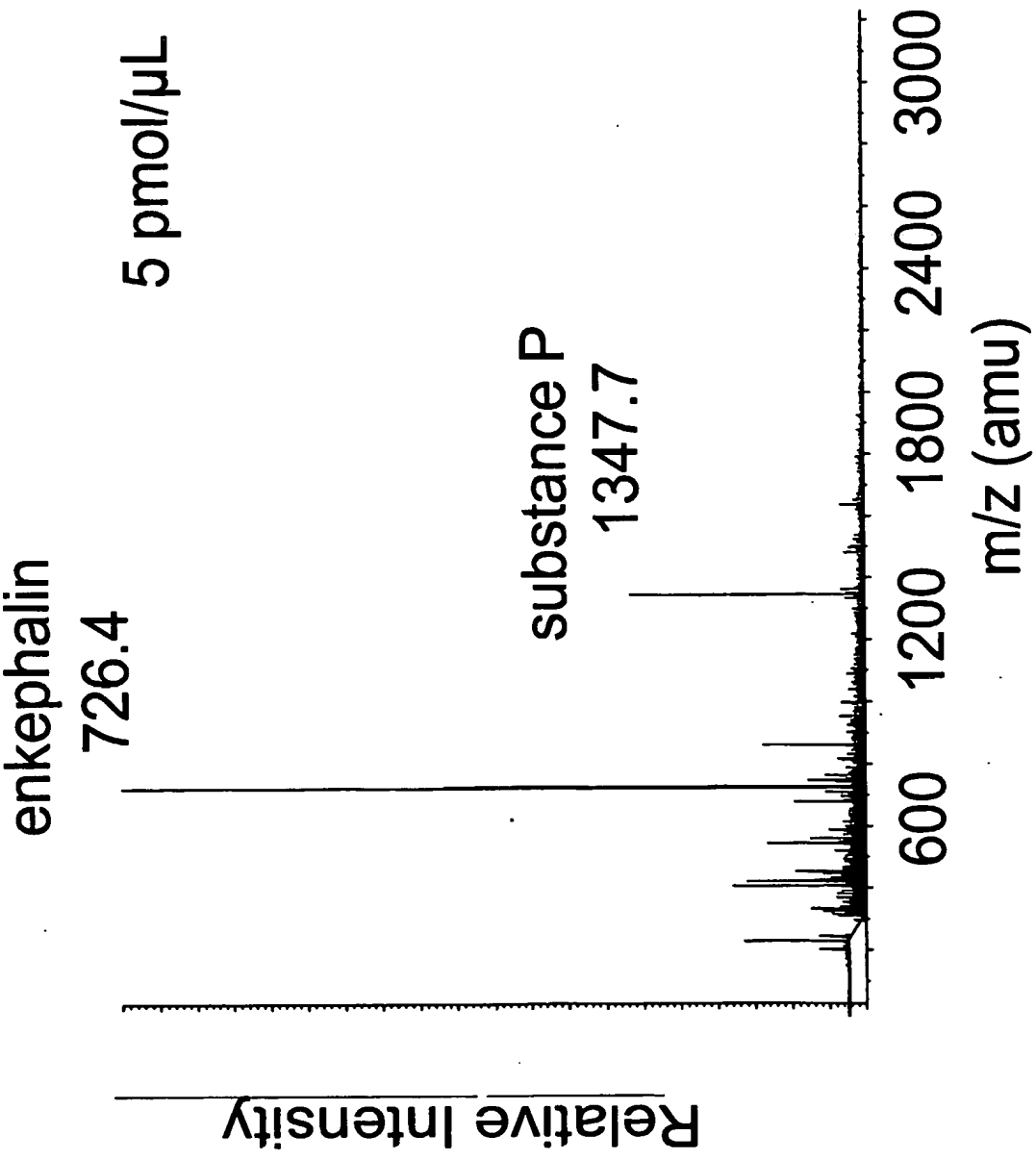
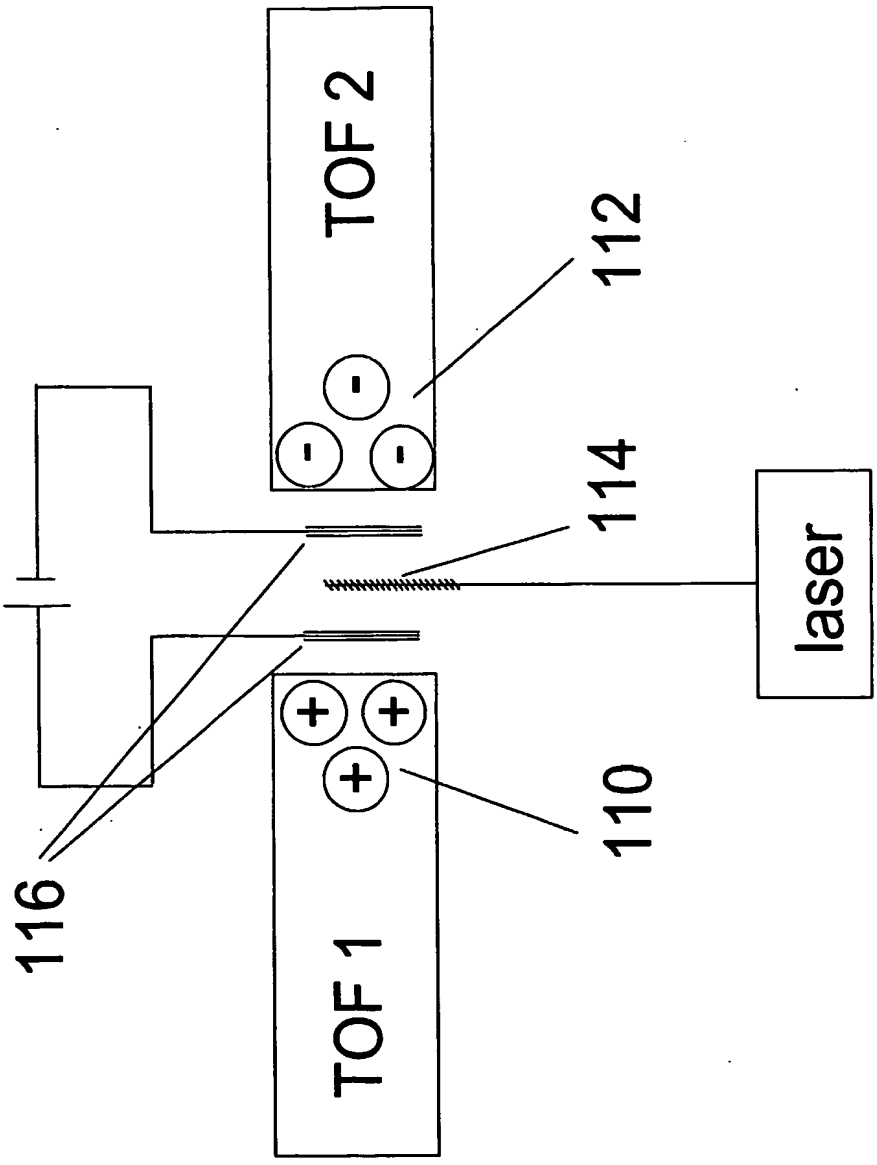

enkephalin
726.4
5 pmol/µL
substance P
1347.7
600
1200
1800
2400
3000
m/z (amu)
Relative Intensity

Figure 18

Figure 19



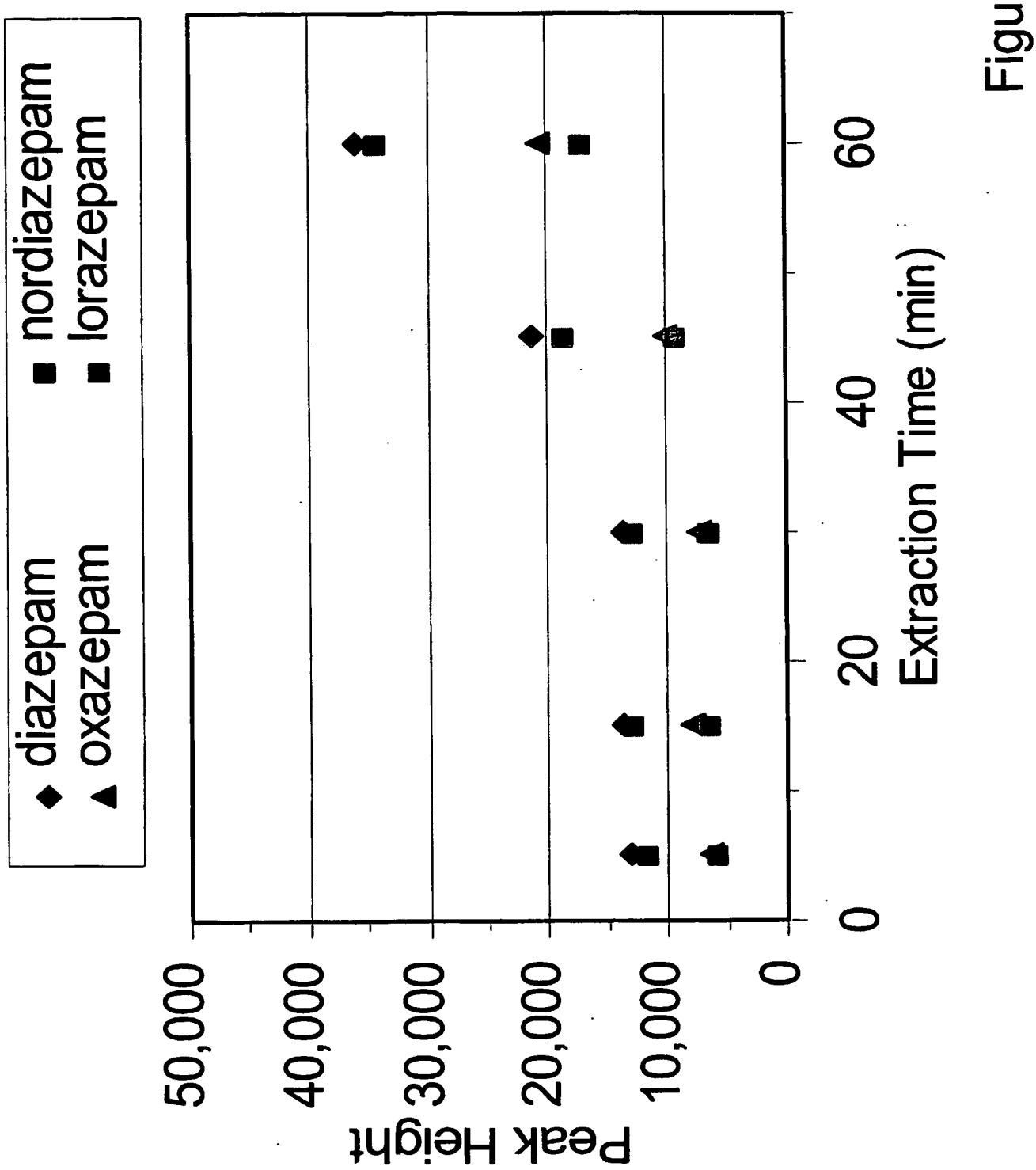

diazepam
nordiazepam
oxazepam
lorazepam
Peak Height
50,000
40,000
30,000
20,000
10,000
0
0
20
40
60
Extraction Time (min)

Figure 20

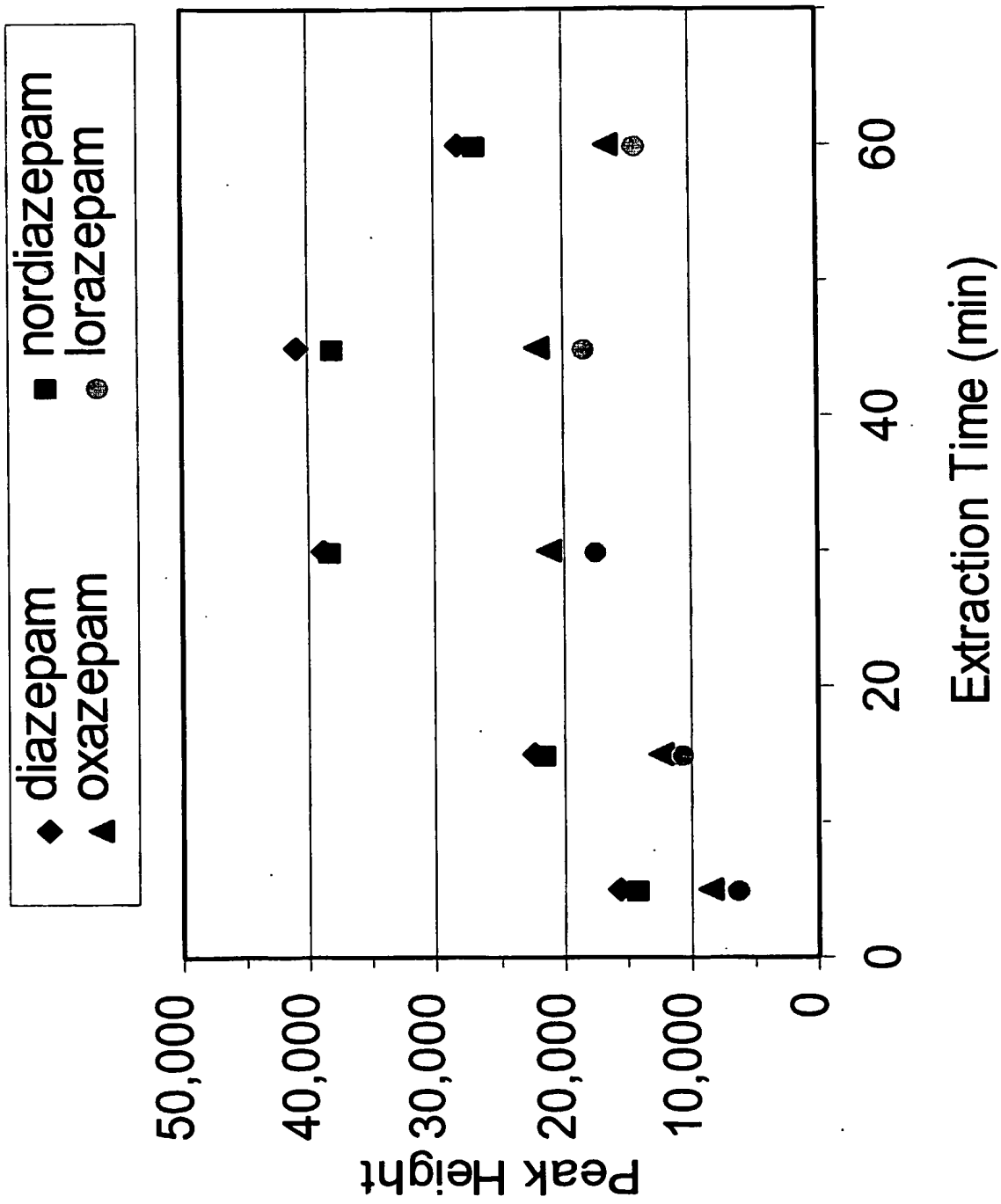

diazepam
nordiazepam
oxazepam
lorazepam
Peak Height
50,000
40,000
30,000
20,000
10,000
0
0
20
40
60
Extraction Time (min)

Figure 21

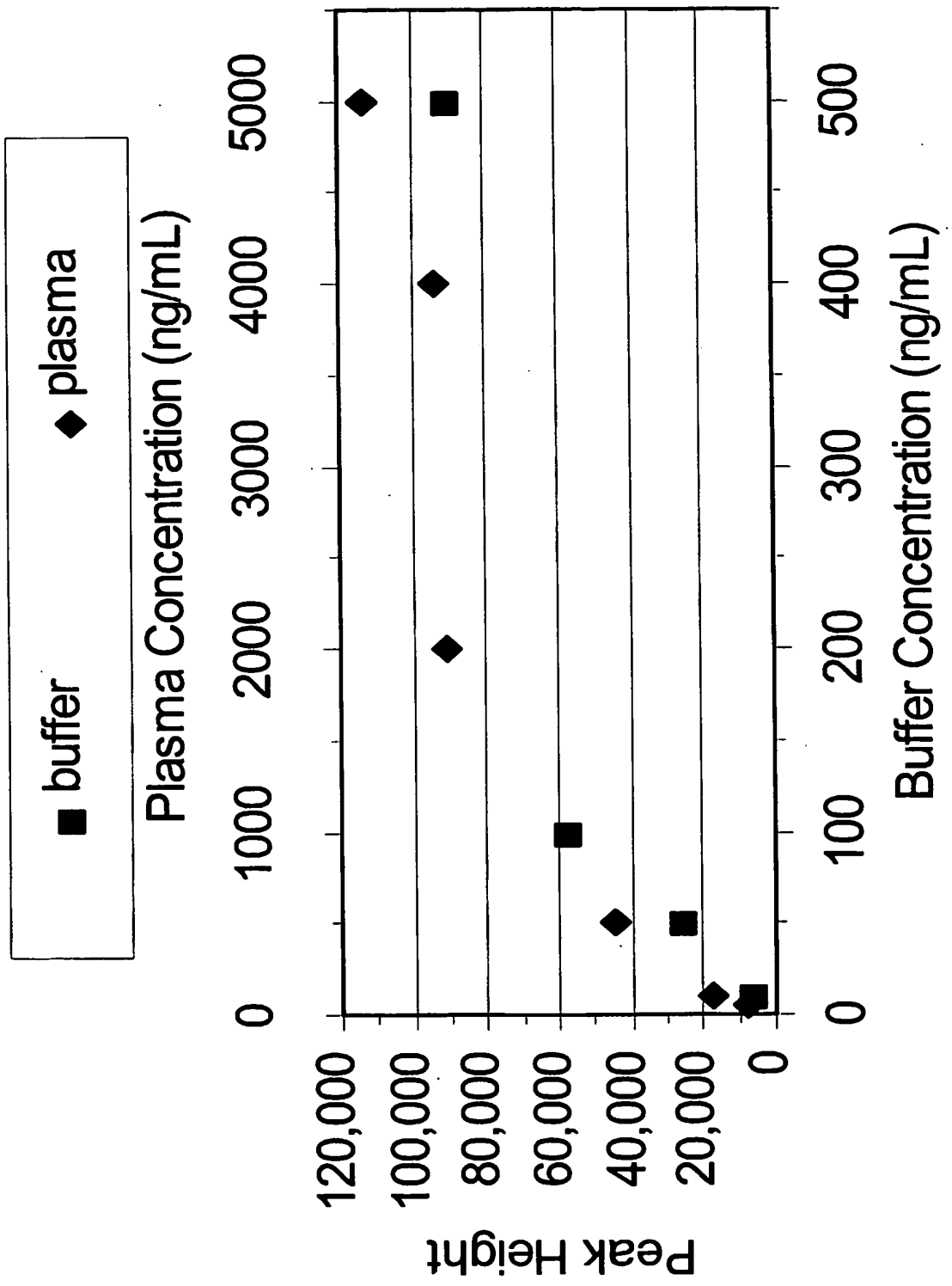

buffer
plasma
Plasma Concentration (ng/mL)
0
1000
2000
3000
4000
5000
Buffer Concentration (ng/mL)
0
100
200
300
400
500
Peak Height
120,000
100,000
80,000
60,000
40,000
20,000
0

Figure 22

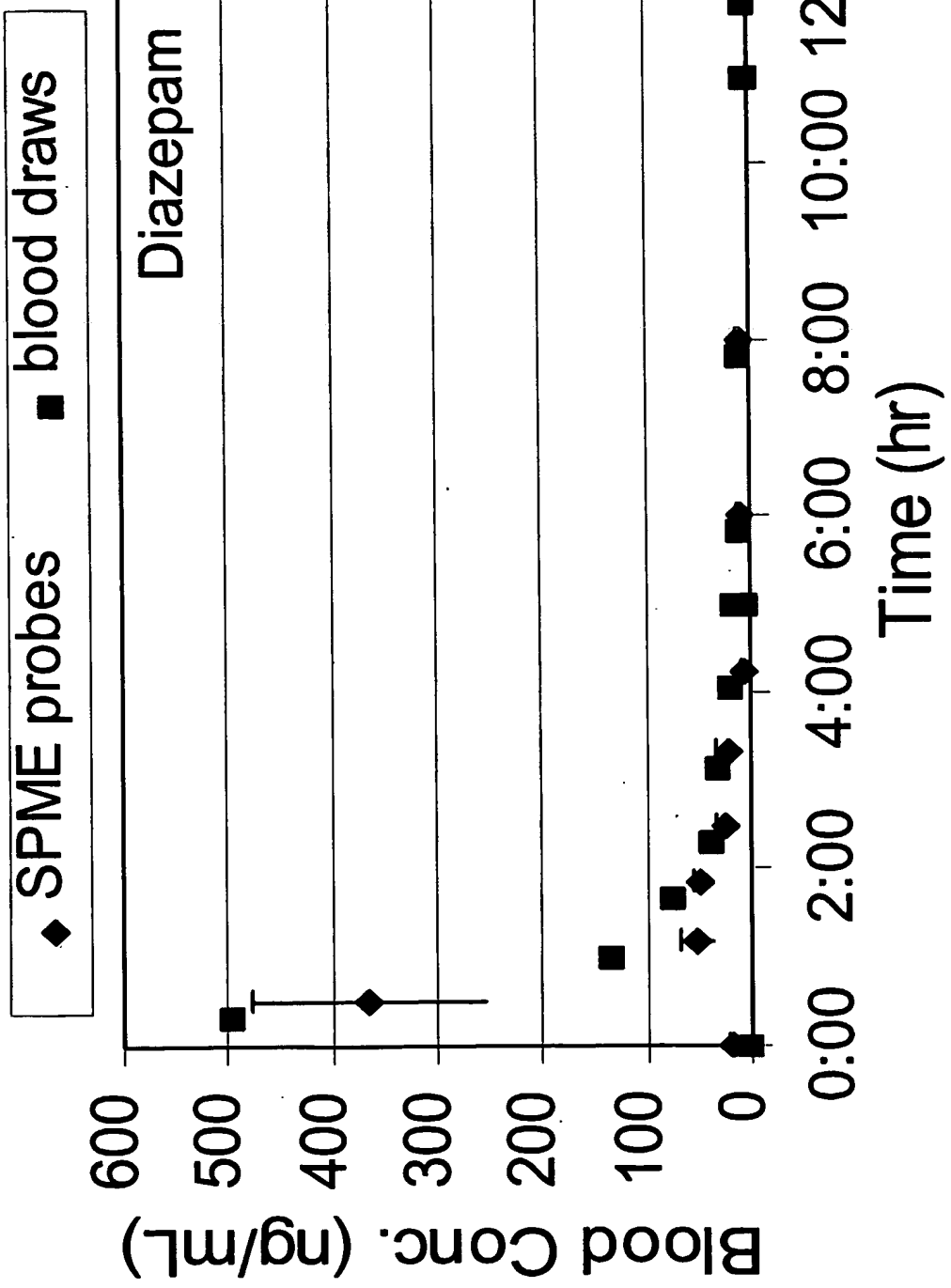

Diazepam
SPME probes
blood draws
Blood Conc. (ng/mL)
0
100
200
300
400
500
600
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Time (hr)

Figure 23

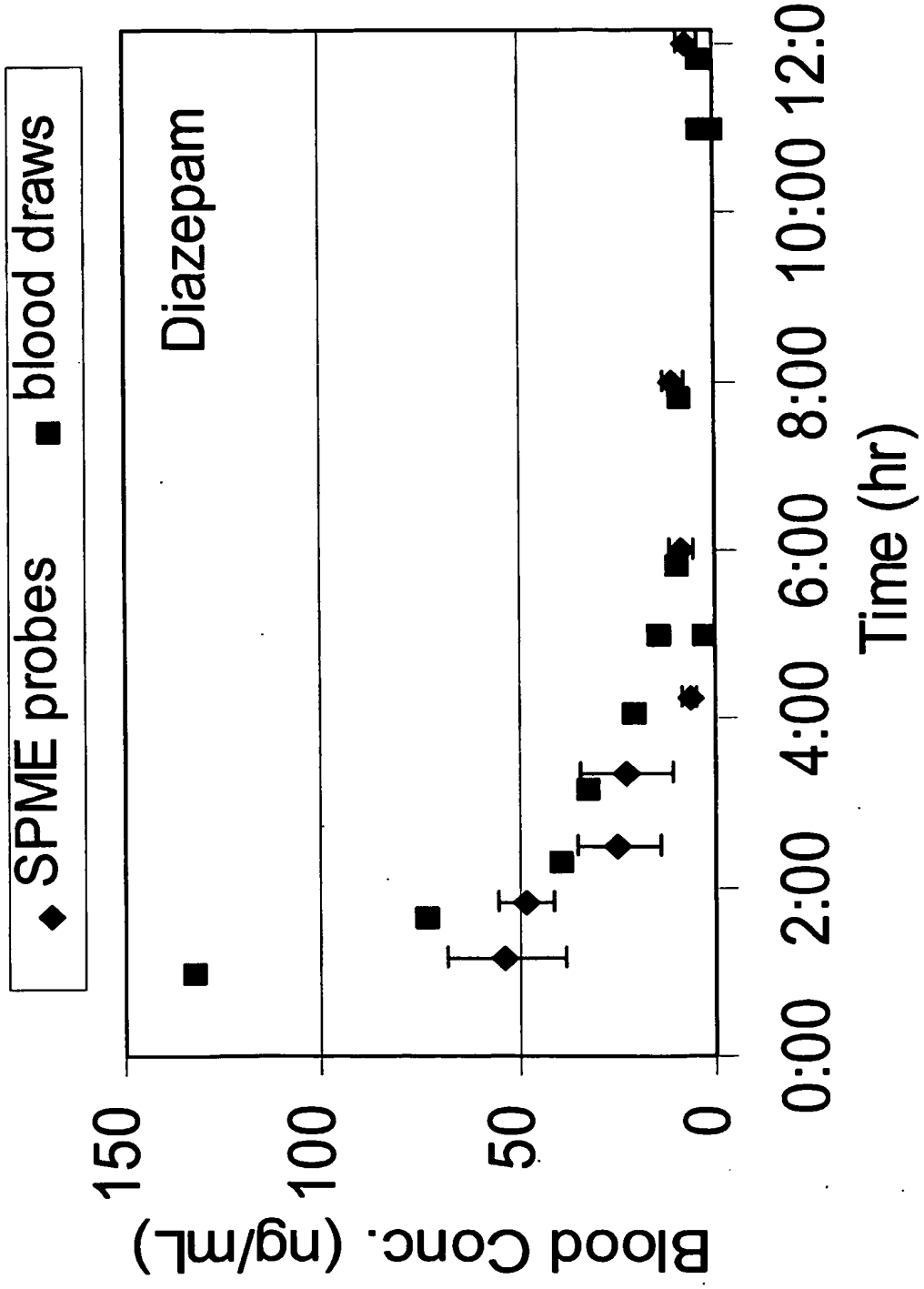

SPME probes
blood draws
Diazepam
Blood Conc. (ng/mL)
150
100
50
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Time (hr)

Figure 24

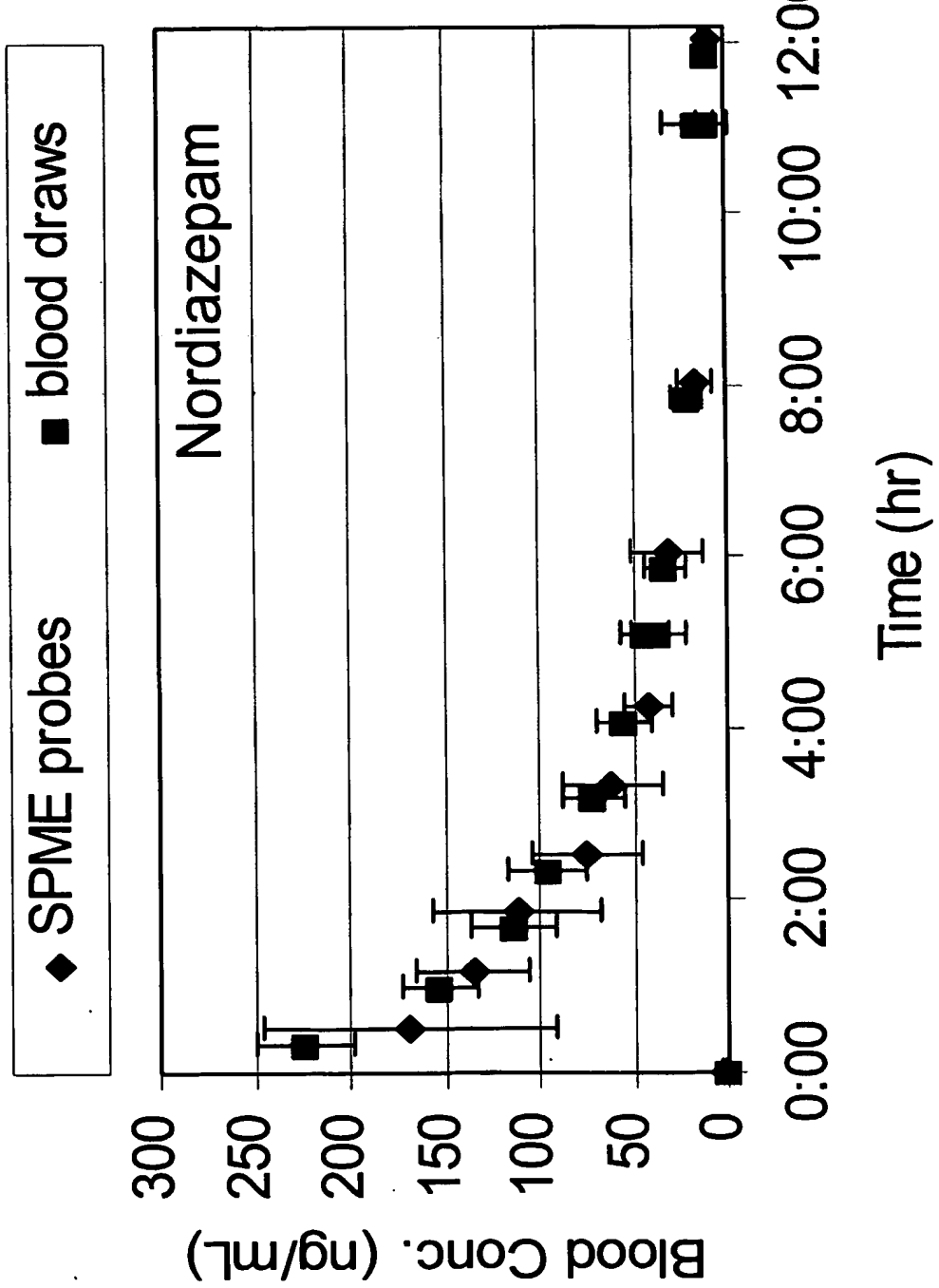

Nordiazepam
◆ SPME probes
■ blood draws
Blood Conc. (ng/mL)
300
250
200
150
100
50
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Time (hr)

Figure 25

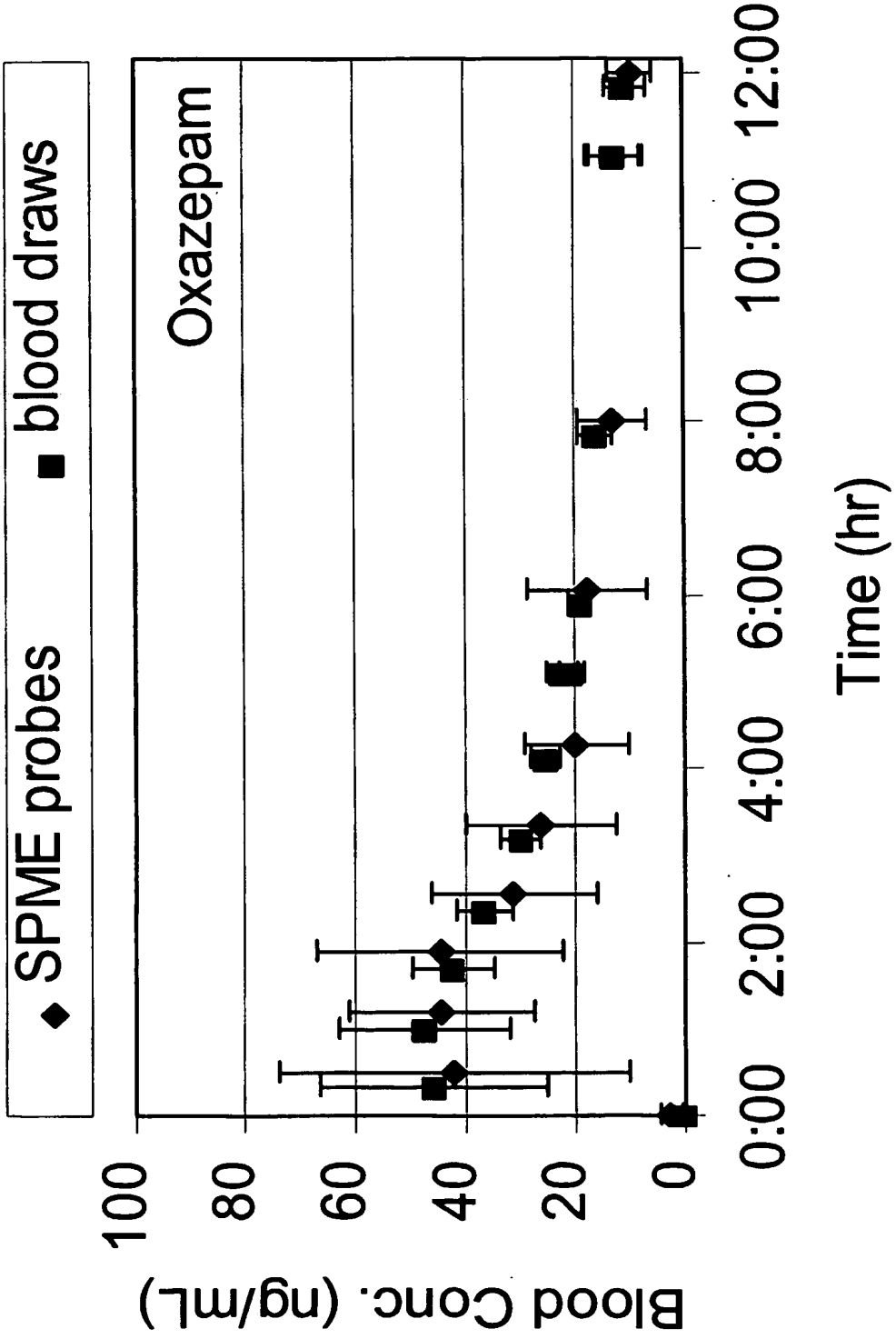

◆ SPME probes
■ blood draws
Oxazepam
Blood Conc. (ng/mL)
100
80
60
40
20
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Time (hr)

Figure 26

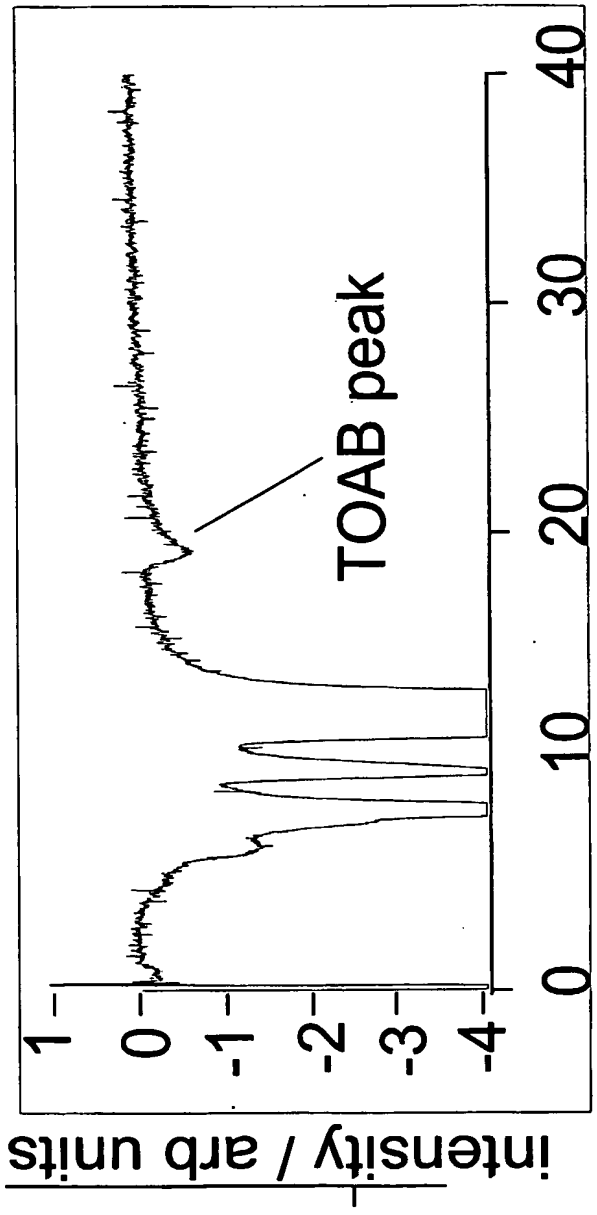

intensity / arb units
1
0
-1
-2
-3
-4
TOAB peak
0
10
20
30
40
x10-3
drift time (s)

Figure 27